

corresponding to the gain chosen by the measurement and calculation means being linked to the output of the gain variation means.

28. (new): The estimator as claimed in claim 26, wherein the means of applying the gains includes:

a 0° - 90° coupler receiving the modulated signal s and transmitting this signal s to its 0° output (Z1) and the signal s phase shifted by 90° to its 90° output, or

a transformer or an amplifier receiving the modulated signal s and transmitting this signal s , and the signal s phase shifted by 180° , or

an electrical length I receiving the modulated signal s and transmitting this signal s , and the signal s phase shifted by ϕ dependent on I .

29. (new): A modulation system with automatic control of the carrier including a modulator receiving the signal to be modulated m and supplying the modulated signal s to be transmitted, including :

an estimator as claimed in claim ²⁵~~10~~ receiving the modulated signal,

a demodulator receiving the signal originating from the gain variation means and supplying to the measurement and calculation means the demodulated signal,

carrier automatic control means for adding to the signal to be modulated m the carrier leak due to the modulator supplied by the measurement and calculation means M2.

30. (new): The modulation system as claimed in claim 29, wherein the carrier automatic control means can also be used to add to the demodulated signal d the carrier leak due to the demodulator supplied by the measurement and calculation means before supplying the corrected demodulated signal to the measurement and calculation means.

31. (new): The use of the estimation method as claimed in claim 17 for a modulation with zero central carrier.